## Case 3417

# *Malmgrenia* McIntosh, 1874 (Annelida, Polychaeta, POLYNOIDAE): proposed conservation of usage by designation of *Malmgrenia andreapolis* McIntosh, 1874 as the type species

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**Abstract.** The purpose of this application, under Article 81.1 of the Code, is to conserve the current usage of the widely used name *Malmgrenia* McIntosh, 1874 (a polynoid worm genus from the northern North Atlantic) by designation of *Malmgrenia andreapolis* McIntosh, 1874 as the type species of *Malmgrenia*. The type species of *Malmgrenia* is at present *Malmgrenia whiteavesii* McIntosh, 1874, which is virtually a nomen nudum. The type material of *Malmgrenia whiteavesii* McIntosh, 1874 has been lost and no other specimens referable to this species have been recorded. It is proposed that *Malmgrenia andreapolis* McIntosh, 1874 be designated as the type species of *Malmgrenia* to maintain the current usage of this generic name.

**Keywords.** Nomenclature; taxonomy; Polychaeta; POLYNOIDAE; *Malmgrenia*; *Malmgreniella*; *Malmgrenia whiteavesii*; *Malmgrenia andreapolis*; scale worm; northern North Atlantic.

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1. The generic name *Malmgrenia* was first published on 1 April 1874 (fide Evenhuis, 2003) by McIntosh (1874a, p. 263) in the combination *Malmgrenia whiteavesii*, n. sp. for a specimen from the Gulf of St. Lawrence, Canada. This was the only species mentioned in connection with this generic name and is thus the type species of *Malmgrenia* McIntosh, 1874, a status that has been accepted by Hartman, 1959; Day, 1967; Fauchald, 1977; Uschakov, 1982 and Chambers & Muir, 1997 (Articles 12.2.6 and 68.3 of the Code).

2. The species *Malmgrenia whiteavesii* McIntosh, 1874 was poorly described by current standards ('a single small specimen . . . segments are about twenty in number . . . scales absent . . . head is apparently eyeless'), although some detail is given about the chaetae. The specimen may have been a juvenile as it had only about 20 segments. Neither the species nor the genus were compared to other taxa. Hanley (1987, p.160) stated 'the original description [of *Malmgrenia whiteavesii*] is too vague to allow determination of the taxonomic status of this specimen', and on page 148 he implied that *Malmgrenia whiteavesii* was a nomen nudum, stating 'the genus *Malmgrenia* is currently invalid as it lacks a valid type species'. Pettibone (1993), having examined the type material of *Malmgrenia whiteavesii* (presumably during her

visit to the Natural History Museum, London in May–June 1967; the material is now apparently lost), implied it was a nomen dubium, stating 'the type specimen in the BMNH consists only of fragments. The genus *Malmgrenia* is considered to be indeterminable' and followed Hanley (1987) in rejecting the genus. Pettibone (1993) then reclassified many species previously referred to *Malmgrenia* and placed them in the previously monospecific genus *Malmgreniella* Hartman, 1967 (p. 37). This assignment was followed by Barnich & Fiege (2001).

3. Chambers & Muir (1997) considered that, based on the original description, *Malmgreniella dicirra* Hartman, 1967 (p. 37), the type species of *Malmgreniella*, had character states (e.g. two types of dorsal cirri) not found in *Malmgrenia*. Pettibone (1993) stated that *Malmgreniella* Hartman, 1967 sensu lato was close to *Harmothoe* Kinberg, 1855, but in her diagnosis of the genus *Malmgreniella* she mentioned lateral antennae with distinct ceratophores inserted terminoventrally, subterminally, or ventrally (converging midventrally). She also erected the new species *Malmgreniella lilianae* Pettibone, 1993, in which all the neurochaetae were unidentate (whereas bidentate neurochaetae are a characteristic of *Harmothoe* Kinberg, 1855, and *Malmgrenia* sensu McIntosh, 1874). Later, the limits of the genus were further extended by the erection of the species *Malmgreniella fimbria* Branch, 1998. This species was described as having 16 pairs of elytra (species of the genera *Harmothoe* and *Malmgrenia* have 15 pairs of elytra). We consider that this use of the generic name *Malmgreniella* by Pettibone (1993), Branch (1998) and Barnich & Fiege (2003) encompasses a wide range of species and includes more than one genus.

4. We consider it desirable that the generic name *Malmgrenia* McIntosh, 1874 should be available for one of these genera. The name *Malmgrenia* has been used, either at generic or subgeneric level, for many years, e.g. in the descriptions of species (Willey (1902), Augener (1918), Berkeley (1923), Augener (1927), Uschakov & Wu (1959), Day (1960), Lagardère (1970), Knox & Cameron (1971), Intes & le Loeuff (1975), Kudenov (1975, 1977), Loshamn (1981) and Ozolinsh (1990)) and in important regional faunal works (Fauvel (1923), Day (1967), Uschakov (1982) and Chambers & Muir (1997)). These publications are widely used.

5. In a footnote, McIntosh (1874a) referred to his genus *Malmgrenia* as 'a new one lately formed for certain British species'. It is clear that McIntosh intended some British species to be published before the Canadian species, although the first British species was actually published five months later, and the second about 21 months later. *Malmgrenia andreapolis* McIntosh, 1874 (p. 195) (published on the 1st September 1874, fide Evenhuis, 2003), was published with the description: 'The scales have a persistent brown belt. Dorsal bristles terminated by a peculiar knob; ventral bifid, but the distal process is constituted by a modification of the knob'. The species is therefore easily identified by workers familiar with the British polynoid fauna. This brief description was repeated by McIntosh (1875, p. 117). Syntype specimens are in the Natural History Museum, London (BMNH 1921.5.1.510–511).

6. *Malmgrenia andreapolis* was described in further detail by McIntosh (1876, 377–378, pl. LXVII, figs. 20–23), along with *Malmgrenia castanea* McIntosh, 1876 (p. 376). This paper was read before the Zoological Society of London on the 19th May 1874 (six weeks after the publication of *M. whiteavesii*), but not published until January 1876 (as noted on the first page of the paper). Syntype specimens of

*M. castanea* are in the Natural History Museum, London (BMNH 1921.5.1.507, 1921.5.1.508, 1921.5.1.509).

7. The genus *Malmgrenia* was more fully characterised by McIntosh (1900, p. 379), using several more characters including 'Head . . . devoid of peaks, the median and lateral tentacles springing from the front . . .'. The exact method of insertion of the lateral antennae is now regarded as an important character in the classification of the family POLYNOIDAE (see Hanley, 1987; Chambers & Muir, 1997, for definitions). *Malmgrenia*, as described by McIntosh (1900), has lateral antennae laterally inserted. This means that the lateral antennae are inserted at the same level as the median antenna (and can be interpreted as 'springing from the front'), rather than being inserted below the median antenna (ventral insertion) or on forward projections of the prostomium (terminal insertion). As all three species (*Malmgrenia whiteavesii*, *Malmgrenia andreapolis* and *Malmgrenia castanea*) were described by McIntosh at roughly the same time (manuscripts prepared about 1874), it may be assumed that he had a clear idea of the generic characters.

8. We regard the generic name *Malmgrenia* McIntosh, 1874 as valid, but to avoid confusion we suggest that it would be better to accept *Malmgrenia andreapolis* McIntosh, 1874 as the type species and not *Malmgrenia whiteavesii* McIntosh, 1874, which is virtually a nomen nudum. Abandoning the generic name *Malmgrenia* McIntosh, 1874 would not be in the interests of nomenclatural stability, especially regarding the species *Malmgrenia andreapolis* McIntosh, 1874 and *Malmgrenia castanea* McIntosh, 1876. To the best of our knowledge, no other specimens of *Malmgrenia whiteavesii* have been reported. However, we are not proposing that *Malmgrenia whiteavesii* McIntosh, 1874 be placed on the Official Index of Rejected and Invalid Specific Names in Zoology, preferring that the name should remain available in case further specimens are discovered in the Gulf of St. Lawrence area which a future author might consider match McIntosh's description.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Malmgrenia* McIntosh, 1874 and to designate *Malmgrenia andreapolis* McIntosh, 1874 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Malmgrenia* McIntosh, 1874 (gender: feminine), type species *Malmgrenia andreapolis* McIntosh, 1874, as ruled in (1) above;

(3) to place on the Official List of Specific Names in Zoology the name *andreapolis* McIntosh, 1874 (specific name of the type species of *Malmgrenia* McIntosh, 1874), as ruled in (1) above.

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Acknowledgement of receipt of this publication was published in BZN **64**: 78.

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